

# ABSTRACT OF THE DISCLOSURE

An evaluation mask for evaluating a projection-type exposure apparatus, the mask including at least one diffraction grating pattern for producing a  
5 diffracted light of the positive first-order and a diffracted light of negative first-order, diffraction efficiencies of the diffracted lights being different respectively, one of the diffracted lights having a magnitude that is zero, and an image of the at least  
10 one diffraction grating pattern being projected onto a test substrate by the projection-type exposure apparatus, and a reference pattern for obtaining a reference image to measure a displacement of the image of the diffraction grating pattern, and an image of the  
15 reference pattern being projected onto the test substrate or the image detector by the projection-type exposure apparatus, wherein the images of the diffraction grating pattern and the reference pattern projected onto the test substrate or the image detector  
20 are used for evaluating the projection-type exposure apparatus.